

Office of Engineering
Project Development Division
Bridge Design Section
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John Bel Edwards, Governor Shawn D. Wilson., Ph.D., Secretary

## **MEMORANDUM**

TO: ALL CONSULTANTS

ALL BRIDGE DESIGNERS

FROM: PAUL FOSSIER, P.E.

BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 68 (BDTM.68)

POLICY ON GEOSYNTHETIC RECINFORCED SOIL INTEGRATED BRIDGE

SYSTEM (GRS-IBS)

DATE: January 26, 2017

The Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS) can provide an economical solution to bridge construction when soil conditions of the project site are favorable for its application. However, the use of GRS-IBS in LADOTD projects must be approved by the Bridge Design Engineer Administrator and shall satisfy the following conditions:

- 1. The use of GRS-IBS provides a distinct design, construction, maintenance and/or economical advantage over a more conventional construction method for the project site. The proposer must provide justification in writing to Bridge Design Engineer Administrator for review and approval.
- 2. The use of GRS-IBS is limited to single-span bridges.
- 3. The use of GRS-IBS is limited to grade separations and very low velocity waterways under pump or gravity flow.
- 4. The use of GRS-IBS will not be considered for waterways subject to more than five feet of scour.

Bridge designers shall work closely with Geotechnical Engineers in early stages of the project development for GRS-IBS applications, to determine if soil conditions are suitable. The design and details shall conform to the "FHWA GRS-IBS Interim Implementation Guide", and "GRS-IBS Design Drawings". These documents can be found on FHWA Center for Accelerating Innovation website under Every Day Counts/EDC-3/GRS-IBS/Tools. A link to the website is provided below.

https://www.fhwa.dot.gov/innovation/everydaycounts/edc-3/grs-ibs.cfm

This technical memorandum is posted on the LA DOTD Website under <u>Inside La DOTD</u> > <u>Divisions - Engineering</u> > <u>Bridge Design</u> > <u>Technical Memoranda - BDTMs.</u>

Please contact Ms. Zhengzheng "Jenny" Fu (225-379-1321, <u>zhengzheng.fu@la.gov</u>) if you have questions or comments.

PF/zzf/aw

Attachment

Cc: Janice Williams (Chief Engineer)

Chad Winchester (Chief, Project Development Division)

Edward Wedge (Deputy Engineer Administrator) Kirk Gallien (Assistant Secretary of Operations) David Miller (Chief Maintenance Administrator)

Michael Vosburg (Chief Construction Division Engineer)

Brian Kendrick (Project Management Director)

Jeff Lambert (Pavement and Geotechnical Engineer Administrator)

Simone Ardoin (Road Design Engineer Administrator)

Art Aguirre (FHWA)

District Administrators, ADA Engineering, ADA Operations, and District Area Engineers